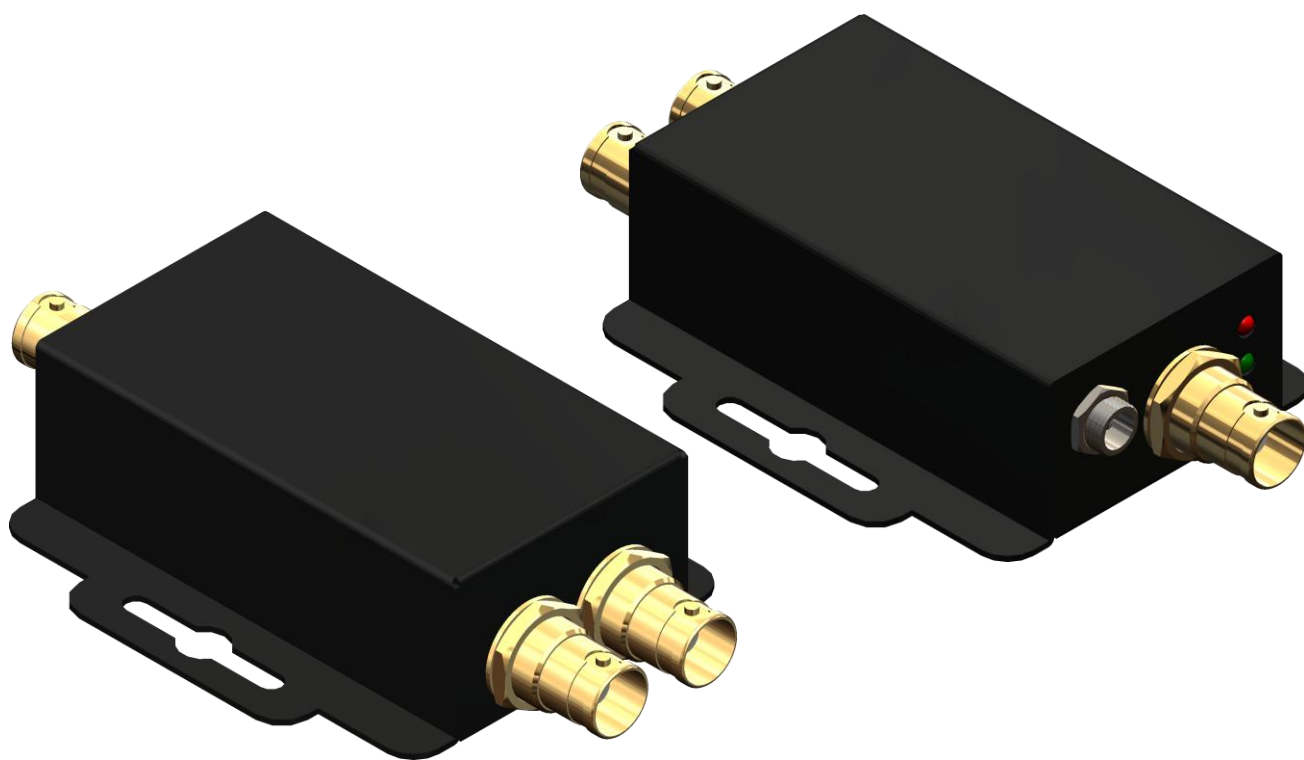


S-SP-3012NRT

1x2 HD-surveillance Distribution Amplifier

User Manual



HDSD



Made in Taiwan



Safety and Notice

The **S-SP-3012NRT 1x2 3G/HD/SD-SDI Distribution Amplifier** has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the **S-SP-3012NRT** should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

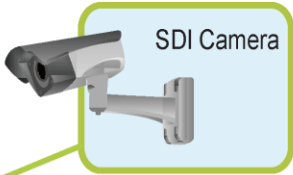
- Follow all instructions and warnings marked on this unit.
- Do not attempt to service this unit yourself, except where explained in this manual.
- Provide proper ventilation and air circulation and do not use near water.
- Keep away the objects that might damage the device and assure that the placement of this unit is on a stable surface.
- Use only the power adapter, power cords and connection cables designed for this unit.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

Introduction

This S-SP-3012NRT receives one SDI input, perfectly duplicates it, and re-transmits four SDI outputs for real time multi-viewing. It is a reliable video device splitting a SDI or HD-SDI video source to four HD-SDI or SD-SDI displays at the same time.

SDI input

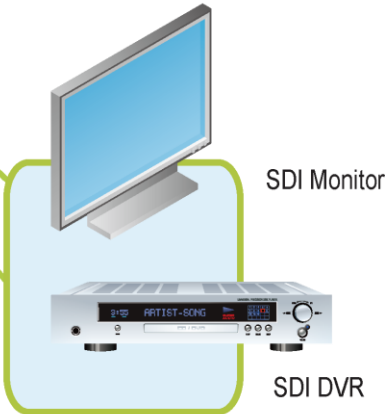
The transmit distance depends on the quality of the SDI signal from source



2 Coaxial outputs

up to 120m transmit distance under 3G-SDI
 up to 150m under HD-SDI
 up to 300m under SD-SDI

*Transmit distance depends strongly on the quality of the SDI signal



Coaxial Cable

	SDI Carema w/o Splitter original transmitting distance	w/ S-SP-3012NRT (70~80% of original transmitting distance) total distance	w/ S-SP-3012 (80~90% of original transmitting distance) total distance
3G (1080p)	if 150 m	260 m	275 m
	if 120 m	210 m	220 m
	if 90 m	155 m	165 m
HD (1080i, 720p)	if 200 m	350 m	370 m
SD (480i, 576i)	if 400 m	700 m	740 m

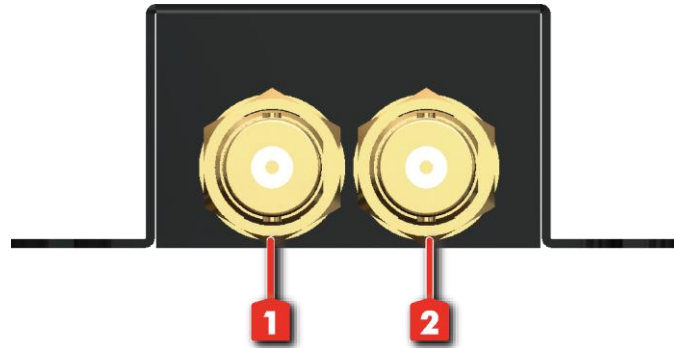
Features

- 3G/HD/SD triple-rate distribution
- Two separately buffered outputs
- Cable equalization (Beldon 1694A) and signal retiming
- Dual color LED indication of input lock and rate
- Pass all ancillary data
- Inter-locked power supply for better fixedness

Specifications & Package Contents

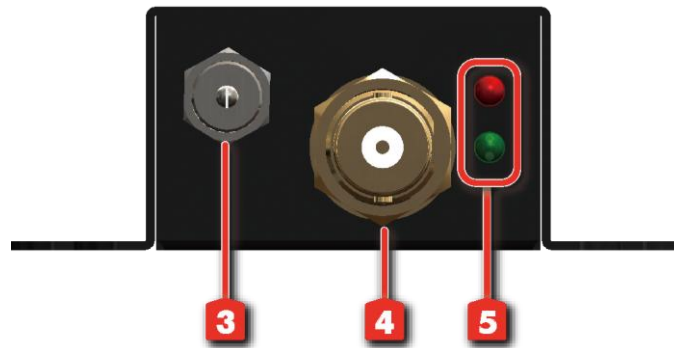
Model Name		S-SP-3012NRT	S-SP-3012RT
Technical			
SDI standards		3G-SDI, SD-SDI & HD-SDI	
Auto HD/SD-SDI detection		Yes	
Supported protocols		SMPTE 259M, SMPTE 292M, SMPTE 424M, SMPTE425M	
Video bandwidth		[2.97Gbps & 2.97/1.001Gbps]	
Data rates		270 / 1483 / 1485 Mbps	
Video support		[HD] 720p50/59.94/60, 1035i50/59.94/60, 1080i50/59.94/60, 1080p24/30 [SD] NTSC@59.94Hz, PAL@50Hz	
SDI signal type		SMPTE-292M, SMPTE-259M	
Output impedance		75Ω	
Reclocking function		No	Yes
Cable equalization		[HD-SDI] up to 150m (500ft) / [SD-SDI] up to 300m (1000ft)	
Audio support		Yes	
RP-918 pathological patterns		Immune	
PCB stack-up		4-layer board [impedance control — differential 100Ω; single 50Ω]	
Input		1x BNC [SDI]	
Output		2x BNC [SDI]	2x BNC [SDI]
BNC connector		75Ω inter-locked socket	
Eye pattern characteristics		Amplitude: Within 800mV ±3% (<10%) Rise overshoot: Less than 2% (<10%) Fall overshoot: Less than 2% (<10%) Long time jitter: 0.195 UI (<1.0 UI) Timing jitter: 0.195 UI (<1.0 UI) Alignment jitter: 0.127 UI (<0.2 UI)	
Mechanical			
Housing		Metal case	
Dimensions [L x W x H]	Model	145 x 80 x 25mm [5.7" x 3.2" x 1"]	
	Package	270 x 175 x 80mm [10.6" x 6.9" x 3.2"]	
	Carton	450 x 370 x 300mm [1'5.7" x 1'2.6" x 11.8"]	
Weight	Model	300g [10.6oz]	305g [10.8 oz]
	Package	775g [1.7 lbs]	780g [1.7 lbs]
Fixedness		Inter-locked power supply	
Power supply		5V 4A DC	
Power consumption		10 Watts [max]	
Operation temperature		0~40°C [32~104°F]	
Storage temperature		-20~60°C [-4~140°F]	
Relative humidity		20~90% RH [no condensation]	
Package Contents		1x S-SP-3012RT / S-SP-3012NRT 1x 5V power adapter 1x User Manual	

Front Panel



1. HD/SD-SDI output 1
2. HD/SD-SDI output 2

Rear Panel



4. HD/SD-SDI input
5. Red light LED — power indicator
Green light LED — SDI signal indicator
3. 5V DC power jack

Hardware Installation

1. Connect a camera or other devices equipped with HD/SD-SDI outputs to S-SP-3012NRT 3G/HD/SD-SDI input.
2. Connect devices equipped with HD/SD-SDI inputs (e.g. monitors or video processors) to S-SP-3012NRT 3G/HD/SD-SDI outputs.
3. Plug power adapter cable into 5V DC power jack.

Limited Warranty

The SELLER warrants the **S-SP-3012NRT 1x2 3G/HD/SD-SDI Distribution Amplifier** to be free from defects in the material and workmanship for 1 year from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 1 year warranty period, The SELLER, at its option, repair or replace the unit, provided that the unit has not been subjected to accident, disaster, abuse or any unauthorized modifications including static discharge and power surges.

Unit that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for 90 days from the day of reshipment to the BUYER. If the unit is delivered by mail, customers agree to insure the unit or assume the risk of loss or damage in transit. Under no circumstances will a unit be accepted without a return authorization number.

The warranty is in lieu of all other warranties expressed or implied, including without limitations, any other implied warranty or fitness or merchantability for any particular purpose, all of which are expressly disclaimed.

Proof of sale may be required in order to claim warranty. Customers outside Taiwan are responsible for shipping charges to and from the SELLER. Cables are limited to a 30 day warranty and cable must be free from any markings, scratches, and neatly coiled.

The content of this manual has been carefully checked and is believed to be accurate. However, The SELLER assumes no responsibility for any inaccuracies that may be contained in this manual. The SELLER will NOT be liable for direct, indirect, incidental, special, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. Also, the technical information contained herein regarding the S-SP-3012NRT features and specifications is subject to change without further notice.